IN THE CLAIMS

Please amend claims 1-3 as follows.

1. (Currently Amended) A gamma correction method comprising:

a first conversion step of converting image data using a first table storing conversion values in addresses corresponding to at least input values[[:]] $u(k)$ represented by $u(k) = a\ b^{-k}$ [[(where a and b are constants and k is 0, 1, 2, ...m)]] of all input values and linear interpolation, where a and b are constants and k is 0, 1, 2, ...m;

a second table storing step of storing in memory a second table storing conversion values set in response to the image data provided at [[said]] the first conversion step in addresses corresponding to at least input values[[:]] $v(k)$ represented by $v(k) = ck+d$ [[(where c and d constants and k is 0, 1, 2, ...n)]] of all input values, where c and d constants and k is 0, 1, 2, ...n; and

a second conversion step of converting the image data provided at said first conversion step using the second table and linear interpolation.

2. (Currently Amended) A gamma correction unit comprising:

a memory [[storing]] that stores a first table storing conversion values in addresses corresponding to at least input values[[:]] $u(k)$ represented by $u(k) = a\ b^{-k}$ [[(where a and b are constants and k is 0, 1, 2, ...m)]] of all input values and linear interpolation, where a and b are constants and k is 0, 1, 2, ...m;

first conversion [[means for converting]] unit that converts image data using the first table and linear interpolation;

second table storing [[means for storing]] unit that stores in the memory a second table storing conversion values set in response to the image data provided by said first conversion [[means]] unit for at least input values[[:]] $v(k)$ represented by $v(k) = ck+d$ [[(where c and d are constants and k is 0, 1, 2, ...q)]] of all input values, where c and d are constants and k is 0, 1, 2, ...q; and

second conversion [[means for converting]] <u>unit that converts</u> the image data provided by said first conversion [[means]] <u>unit</u> using the second table and linear interpolation.

3. (Currently Amended) An image read system comprising<u>:</u>

a scanning section [[for scanning]] <u>that scans</u> an optical image and [[outputting]] <u>outputs</u> image data representing the optical image[[,]]<u>;</u>

an optical system [[for inputting]] <u>that inputs</u> an optical image of an original to the scanning section[[, and]]<u>;</u>

a gamma correction unit <u>including,</u> [[as claimed in claim 2, characterized by:]]

<u>a memory that stores a first table storing conversion values in addresses corresponding to at least input values u(k) represented by u(k) = a b^{-k} of all input values and linear interpolation, where a and b are constants and k is 0, 1, 2, ...m,</u>

<u>a first conversion unit that converts image data using the first table and linear interpolation,</u>

<u>a second table storing unit that stores in the memory a second table storing conversion values set in response to the image data provided by the first conversion unit for at least input values v(k) represented by v(k) = ck+d of all input values, where c and d are constants and k is 0, 1, 2, ...q, and</u>

<u>a second conversion unit that converts the image data provided by the first conversion unit using the second table and linear interpolation;</u>

<u>a</u> setting [[means for causing]] <u>unit that causes</u> the scanning section to output low-resolution image data, causing the first conversion [[means]] <u>unit</u> to convert the low-resolution image data output by the scanning section, and setting a conversion value in the second table in response to the low-resolution image data provided by the first conversion [[means]] <u>unit</u>; and

<u>a</u> conversion [[means for causing]] <u>unit that causes</u> the scanning section to output high-resolution image data and [[causing]] <u>causes</u> the first conversion [[means]] <u>unit</u> and the second conversion [[means]] <u>unit</u> to convert the high-resolution image data output by the scanning section.